BACKGROUND

- The acute and chronic consequences of hepatitis B virus (HBV) infection are major health problems.

- The Centers for Disease Control and Prevention (CDC) estimates **200,000-300,000** new HBV infections occur each year in the U.S.

- Approximately **1-1.25 million** persons have **chronic HBV** in the U.S. and are potentially infectious to others.

- Many chronically infected persons are at risk of long-term sequelae such as **chronic liver disease** and **liver cancer**. Each year, approximately **4,000-5,000** of these persons die from **chronic liver disease**.

- At least **50%** of persons who become infected have no symptoms and may not know they have it and yet may be able to infect others. Even if people have symptoms, unless they have jaundice, the symptoms are flu-like (fatigue, abdominal pain, joint pain, and loss of appetite).

- Of the approximately four million births in the U.S. each year, an estimated **19,000** occur to HBV-infected women. Unless these infants receive appropriate post-exposure prophylaxis, transmission of HBV from their mothers results in up to **90%** of these infants becoming infected; of those infected, **90%** will become **chronic carriers**. Up to **25%** of the infants who become chronically infected will die from **primary hepatocellular carcinoma** or **cirrhosis** of the liver, usually as adults.

- Immunization with hepatitis B vaccine is the most effective way to prevent HBV infection. **Perinatal transmission** of HBV can usually be prevented if HBsAg-positive pregnant women are *identified* and their infants receive appropriate post-exposure prophylaxis, which consists of hepatitis B immune globulin (HBIG) *and* hepatitis B vaccine, shortly after birth, followed by additional doses of vaccine at 1-2 months and 6 months of age for full protection. CDC recommends testing <u>all</u> pregnant women for HBV early in <u>each</u> pregnancy. Once a person is infected with HBV, hepatitis B vaccine will not help him/her.

- In late 1989, the Washington State Department of Health (DOH) received grant funds from CDC to establish a perinatal hepatitis B prevention program. Such a program exists in all states and several U.S. territories.

PROGRAM GOAL AND OBJECTIVES

The Perinatal Hepatitis B Prevention Program's overall goal is ***to reduce the incidence of hepatitis B in infants born to infected (HBsAg-positive) mothers***. Achievement of this goal involves **identifying HBsAg-positive pregnant women** and their **household/sexual contacts** *and* **establishing an effective follow-up system to assure that infants born to HBsAg-positive mothers receive appropriate post-exposure prophylaxis and susceptible contacts receive a three-dose series of hepatitis B vaccine**. Appropriate post-exposure prophylaxis for these infants includes hepatitis B immune globulin (HBIG) and hepatitis B vaccine, shortly after birth, followed by 2 additional doses of vaccine (at 1-2 months and 6 months of age).

Objectives to attain this goal include:

- Assure that at least **100%** of all pregnant women who deliver are screened for HBsAg prenatally or at delivery.

- Assure that **95%** of expected births to HBsAg-positive mothers are identified.

- Assure that at least **95%** of infants born to identified HBsAg-positive mothers receive hepatitis B immune globulin (HBIG) *and* Dose #1 of hepatitis B vaccine within 7 days of birth *and* complete the 3-dose hepatitis B vaccine series by 6-8 months of age.

- Assure that at least **90%** of *susceptible* sexual partner(s) and household contacts of identified HBsAg-positive pregnant women complete the 3-dose hepatitis B vaccine series.

GUIDELINES FOR PRENATAL CARE PROVIDERS

1. Screen **every** pregnant woman for **HBsAg** early in **each** pregnancy per Centers for Disease Control and Prevention (CDC) and American College of Obstetricians and Gynecologists (ACOG) recommendations. HBsAg testing should be repeated late in pregnancy if the woman is HBsAg negative, but at high risk of hepatitis B infection (e.g. injection drug user, infected with other sexually transmitted diseases, having multiple sexual partners).

2. Report **every** HBsAg-positive pregnant woman to the local health jurisdiction (LHJ) staff within 3 working days. ***Please note: this is a required reporting condition according to WAC 246-101-101***. LHJ staff provides case management and follow-up services for infants and family members.

3. Counsel each **HBsAg-positive** pregnant woman about:
   - Routes of transmission and prevention of transmission
   - Medical follow-up with a liver specialist
   - Need for her infant to receive HBIG and hepatitis B vaccine within 12 hours of birth and two additional doses of hepatitis B vaccine at 1-2 months of age and 6 months of age, and post-vaccine screening at 9-15 months of age
   - Need for screening of household contacts and sexual partner and hepatitis B vaccination, if *susceptible*, at intervals of 0, 1-2, and 4-6 months
   - Local health jurisdiction staff will be contacting her to provide case management services to her family

1. Report **every** HBsAg-positive pregnant woman to the hospital prior to admission for delivery to assure her infant will receive appropriate post-exposure prophylaxis.

2. Provide educational materials about hepatitis B.